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A NEW POCKET GOPHER FROM SOUTHEASTERN UTAH

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In the comprehensive taxonomic work on the pocket gophers of Utah, Durrant (The Pocket Gophers (Genus Thomomys) of Utah, Univ. Kansas Publ., Mus. Nat. Hist., 1(1) :1-82, Aug. 15, 1946) referred the animals from the mountains east of the Green and Colorado rivers in Utah to the subspecies *Thomomys talpoides fossor,* but mentioned (p. 22) that they were not typical. Furthermore, he remarked that, when more material became available, they might prove to be sufficiently different from *T. t. fossor* to merit separation and naming. Subsequently, additional specimens were collected by field parties sponsored by the University of Utah Research Council. Comparison of these animals with near topotypes of *T. t. fossor* indicates that they do constitute an heretofore undescribed subspecies. It seems appropriate to name the new animal in honor of Professor Stephen D. Durrant who has contributed so materially to the understanding of the taxonomy of this group of mammals in Utah. The name and description of the new form are as follows:

Thomomys talpoides durranti new subspecies

Type.—Female, adult, skin and skull, No. 5603, Museum of Zoology, University of Utah, Johnson Creek, 14 mi. N Blanding, 7,500 ft., San Juan County, Utah; May 23, 1947; collected by Keith R. Kelson, original number 201.

Range.—The mountains east of the Green and Colorado rivers in Utah, bounded by the southern flank of the East Tavaputs Plateau on the north and the Abajo [Blue] Mountains on the south.

Diagnosis.—Size medium (see measurements); hind foot average for the species. Color: Upper parts Cinnamon-Brown grading to Cinnamon-Buff on flanks and inguinal region (capitalized color terms according to Ridgway, Color Standards and Color Nomenclature, 1912); underparts Avellaneous with deep Mouse Gray undertone; chin and openings to the check pouches white; ears medium in size with rounded or pointed pinnae, pinnae with moderate pigmentation; postauricular patches re-

duced, between Dusky Neutral Gray and black; proximal half dorsal surface hind feet same color as upper parts of body, distal half with short whitish hairs; tail white below, Cinnamon-Brown above in the proximal half, grading to white distally. Skull: Size medium, angular and narrow; frontonasal region flat or nearly so; nasals rounded proximally; premaxillae extending posterior to nasals; rostrum long; interparietal boardly triangular; tympanic bullae large and well inflated ventrally; basioccipital narrow; supraoccipital markedly lengthened, developed as a distinct shelf rather than as a crest; upper incisors long and moderately recurved; molariform dentition light.

Measurements.—Average and extreme measurements in millimeters of 6 males and 8 females from the type locality are, respectively, as follows: Total length, 208 (224-201), 208 (220-195); length of tail, 61 (66-54), 59 (63-55); length of hind foot, 28 (32-26), 28 (31-26); basilar length, 31.6 (35.0-31.0), 30.3 (31.2-28.8); length of nasals, 13.7 (14.9-13.1), 13.0 (14.1-11.9); zygomatic breadth, 20.2 (20.8-19.7, available from only 3 males), 20.7 (21.5-19.8); mastoid breadth, 17.1 (17.9-16.8), 17.7 (18.5-16.3); interorbital breadth, 6.3 (6.5-6.1), 6.3 (6.5-5.8); alveolar length of upper molariform series, 7.1 (7.6-6.8), 7.2 (7.7-6.8); extension of premaxillae posterior to nasals, 0.6 (0.8-0.1), 0.5 (0.9-0.0); length of rostrum, as measured from the dorsal point of union of the lacrimal, frontal, and maxilla to the tip of the nasal, 15.6 (17.1-15.0), 15.4 (16.2-14.8); breadth of rostrum, 7.3 (7.8-7.0), 7.2 (7.5-6.8).

Comparisons.—From *Thomomys talpoides ocius, T. t. durranti* can be distinguished as follows: Size larger throughout. Color: Darker, brownish as opposed to grayish. Skull: More angular and massive; frontonasal region more nearly flat as opposed to gently arched; nasals and rostrum longer; supraoccipital shelf more pronounced, extended farther posteriorly; incisors markedly longer and less recurved; tympanic bullae smaller; interorbital breadth actually as well as proportionately narrower; anterior palatine foramina larger; interpterygoid space more narrowly V-shaped; interparietal triangular rather than suborbicular.

From *Thomomys talpoides uinta, T. t. durranti* differs as follows: Skull: Longer and narrower; rostrum and nasals longer; interparietal triangular rather than pentagonal; tympanic bullae larger and more inflated ventrally; basioccipital narrower; supraoccipital a shelf rather than a crest; frontonasal region more nearly flat.

From 6 males, near topotypes, of *Thomomys talpoides fossor,* which it most nearly resembles, from La Plata City, 9,200 feet, La Plata County, Colorado, *T. t. durranti* differs as follows: Tail shorter (61 mm. as opposed to 65 mm.). Color: Slightly lighter dorsally in specimens of comparable molt; postauricular patches smaller. Skull: More angular; more nearly flat in the frontonasal region as opposed to gently arched; basilar length averages slightly greater (31.6 mm. as opposed to 30.6 mm.); extension of the premaxillae posterior to the nasals greater (0.6 mm. as opposed to 0.05 mm.); rostrum broader (7.3 mm. as opposed to 6.9 mm.); supraoccipital shelf extended farther posteriorly; interparietal averages broader in proportion to the length; upper incisors not as procumbent; cranial root of the zygomatic arch heavier.

Remarks.—In his original description of *Thomomys fossor,* Allen

(Bull. Amer. Mus. Nat. Hist., 5:51, April 28, 1893) placed particular emphasis on the fact that the premaxillae terminated posteriorly on the same line as the nasals. The near topotypes from La Plata City, La Plata County, Colorado, available to me, agree in this character with Allen's description. Other specimens of *T. t. fossor* from Colorado which I have examined do not agree with the description in this particular, nor do those of the near topotypical series studied by Durrant (p. 26-27). Since the La Plata series also agrees with the description in other characters, I consider it to be fairly typical. Indeed, the variability is so great in animals from Colorado, assigned to *T. t. fossor* that I have studied that it seems apparent that when the species *Thomomys talpoides* of that state has been thoroughly re-studied, many of the animals now understood to belong to the subspecies *T. t. fossor* will be found to comprise several unnamed kinds.

Twelve specimens from the La Sal Mountains in Grand and San Juan counties, Utah, are intergrades between *T. t. fossor* and *T. t. durranti.* The degree of intergradation appears to be proportional to the relative distance that the La Sal Mountains are removed from the two type localities. They resemble *T. t. durranti* in the extent of the supraoccipital shelf, length and curvature of the upper incisors, heavy anterior root of the zygomatic arch, length of the tail and overall coloration; they are like *T. t. fossor* in the length of the hind foot; they are intermediate between the two in the shape of the frontonasal region, and the posterior extension of the premaxillae; they exceed both *T. t. durranti* and *T. t. fossor* in total length, basilar length, and the breadth of the rostrum. These specimens more nearly resemble *T. t. durranti* to which they are here referred.

Specimens from Oak Spring, Middle Fork Willow Creek, 14 miles north Thompson, Grand County, Utah, were considered by Durrant (p. 22) to be intergrades between *T. t. ocius* and *T. t. fossor,* and referable to the latter. These animals are here referred to *T. t. durranti* primarily on distributional concepts. A series of 5 specimens from PR Springs, 43 miles south of Ouray, 7,950 feet, Uintah-Grand County line, Utah, and 3 specimens from Brown's Corral, 20 miles south of Ouray, 6,250 feet, Uintah County, Utah, are intergrades between *T. t. durranti* and *T. t. ocius* the range of which occurs to the north of these localities. In general the skulls are more like those of *T. t. ocius,* but show features of *T. t. durranti* in the shape of the interparietal and the size of the tympanic bullae. The color of the specimens from PR Springs is like that of *T. t. durranti,* while that of the specimens from Brown's Corral is like that of *T. t. ocius.* Both are closer to *T. t. ocius* to which they are here referred. Gradual intergradation is thus demonstrated between *T. t. durranti* and *T. t. ocius* in a series of specimens taken along a north-south transect. The ranges of the two subspecies may be regarded as meeting between the PR Springs and Oak Creek localities or, roughly, along the southern crest of the East Tavaputs Plateau. Specimens from the vicinity of Vernal, Uintah County, Utah, north of the above localities, were regarded by Durrant (p. 18) as intergrades between *T. t. ocius* and *T. t. uinta.* Durrant also commented on intergradation between *T. t. uinta* and *T. t. ravus* (p. 16) and suggested slight intergradation between *T. t. uinta* and *T. t. pygmaeus* (p. 15). Intergradation is, then,

demonstrable in the several subspecies of the *Thomomys talpoides* group from the eastern half of Utah.

In view of the foregoing, *Thomomys talpoides fossor* is no longer considered to be a part of the fauna of Utah.

Specimens examined.—Total, 50, from the Museum of Zoology, University of Utah, distributed as follows: *Grand County*: Warner R. S., La Sal Mountains, 9,750 ft., 3; *San Juan County:* 1 mi. SE Mesa R. S., La Sal Mountains, 9,200 ft., 4; 3 mi. W Geyser Pass, La Sal Mountains, 10,000 ft., 5; Dalton Spring, 5 mi. W Monticello, Abajo [Blue] Mountains, 8,300 ft., 14; Gooseberry R. S., Elk Ridge, 8,300 ft., 5; Duck Lake, 1 mi. S Gooseberry R. S., Elk Ridge, 8,400 ft., 5; Johnson Creek, 14 mi. N Blanding, 7,500 ft., 14.

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